Answer whether each of the following errors is a syntax error, run-time error, or logic error:

```
int value = 64.0;
System.out.println("Can't wait for Wednesday!);
int[] array = new int[10]; System.out.println("Last value is " + array[10]);
int[] array = new int[10]; System.out.println("First value is " + array[1]);
```

Which of the following code snippets could cause a runtime, but *not* a compile time error?
More than one might be correct. Assume the necessary import statements are present.

```
a) Scanner scan = new Scanner(System.in);   int num = scan.nextLine();
b) int num = Integer.parseInt(args[0]);
c) String[] arr = new String[4];
d) int[] arr = new int[2];   arr[2] = 100;
e) ArrayList<string> ls = new ArrayList<>();
```

Fill in the body of the following function:

```
int sumArrayElements(int[] theArray) {
```

A palindrome is a word that is spelled the same backwards as it is forwards, such as "radar". The following code is supposed to print TRUE if its input is a palindrome, but the code is buggy. Please fix it.

```
class Palindrome {
  Palindrome(String input) {
    while (index <= input.length) {
      if (input.charAt(index) == input.charAt(input.length) - index) {
        System.out.println("TRUE");
      }
    }
    System.out.println("FALSE");
  }
}
```

Write a class for a `Circle`. A `Circle` is described only by a `radius`, which should be a `double`. The constructor should allow a user to create a `Circle` of any desired size, but only ever with a value above 0. The `Circle` class should only have two methods besides the constructor: `perimeter()`, which should return the value of the perimeter; and `area()`, which should return the value of the area. (Recall that the formula for perimeter is 2*p*r, the formula for area is p*(r*r), and the approximate value of p is 3.14.)

BONUS: how would you throw an exception if the given radius is not ok?

Write code for the main() method that reads an array of one or more strings from the command line and prints them out, centered, surrounded by asterisks on the border, e.g.

```
***********************
* Hi Mom, how are you? *
*   Happy birthday!    *
***********************
class Banner {
    static public void main(String[] args) {
```

Write a program that reads an integer from the command line that represents some number of seconds. (The number will be an integer >= 0.) The program shall print

    `<<number>> hours, <<number>> minutes, <<number>> seconds`

where the number of seconds and number of minutes is less than 60. The time represented by the printed answer should equal the input. For example, if the input is 3600, the output should be 1 hours, 0 minutes, 0 seconds.